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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,051	07/24/2000	R. Bruce Wallace	12680R0US02U	6228

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EXAMINER	
DONAGHUE, LARRY D	

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/624,051	WALLACE ET AL.	
	Examiner	Art Unit	
	Larry D. Donaghue	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. Claims 1-18 are presented for examination.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-7, and 10-16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagle, D., Active Storage Networks, www.ece.cmu.edul-asn/old/pubs/Active%20Storaqe%20Nets%201ntro~odf, Carnegie Mellon Univ., pp. 1-14, July 16, 1998, in view of Wang et al. (6,470,382) and Wang et al. (6,834,326).

Apparatus claims 10-16 and 19-20 will be discussed before method claims 1-7.

Regarding claim 10, Nagle teaches the invention substantially as claimed by disclosing an apparatus (p. 4 slide 7 active router) that facilitates operations related to data storage between a first device (p. 4 slide 7 pc/client) and at least one data storage unit (p. 4 slide 7 NASD) in a computer network (p. 4 slide 7 showing LAN/WANG protocol between the pc and active router) comprising: A file system that indicates location of data stored on at least one data storage unit (p. 4 slide 7 showing file system);circuitry that processes network protocol data units associated with the operations based on storage services protocol set information to facilitate transmission of the data unit (p. 4 slide 7 active router). Nagle does not explicitly teach a system wherein said processing of the protocol data units includes encapsulating non-network protocol transactions into network protocol data units.

Wang et al.. expressly taught a system wherein said processing of the protocol data units includes encapsulating storage services transactions into network protocol data units (col. 19,line 64 – Col. 20, line 16).

It would have been obvious to combine the two reference as both are directed to the solution of the same problem and the express teaching of Wang et al. (6,470,382) (col. 2, line 50 – col. 3, line 5).

Neither Nagle or Wang et al. (6,470,382) expressly taught that the processing was performed at a switch on the network. Wang et al. (6,834,326) taught performing the processing at a switch in the network (col. 33, line 64 – col. 34, line 7; col. 8, line 41-63; abstract).

It would have been obvious to combine the references as they are directed to the solution of the same problem and the express teaching of Wang et al. (6,834,326) (col. 2, lines 15 –21).

Regarding claim 11, Nagle teaches an apparatus wherein said circuitry balances loads associated with selected read transactions (p. 5 slide 10).

Regarding claim 12, Nagle teaches an apparatus wherein said circuitry duplicates data units associated with selected write transactions to achieve mirroring (p. 6 slide 11).

Regarding claim 13, Nagle teaches an apparatus wherein said circuitry duplicates data units associated with selected transactions to achieve N-way mirroring (p. 6 slide 11).

Regarding claim 14, Nagle teaches an apparatus wherein said circuitry duplicates selected metadata (p. 9 slide 17).

Regarding claim 15, Nagle teaches an apparatus wherein said circuitry facilitates ensuring right to access based on originator (p. 7 slide 13 access control).

Regarding claim 16, Nagle teaches a system wherein said circuitry blocks access to selected destinations (p. 7 slide 13 access control).

Regarding claim 20, Nagle teaches a system wherein said circuitry includes a switch (p. 5 slide 10).

Regarding claims 1-7, they are method claims corresponding to apparatus claims 10-16, respectively. Since they do not teach or define above the information in the corresponding apparatus claims, they are rejected under the same basis.

Claims 8-9 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagle in view Wang et al. (6,400,730) and Wang et al. (6,834,326) and further in view of Pfleeger, C., Security in Computing, 2"d ed., Prentice-Hall PTR, pp. 286-292, 1997. Apparatus claims 17-18 will be discussed before method claims 8-9.

Regarding claim 17, the combination of Nagle in view of Wang et al. teaches the invention substantially as claimed. See the rejection of claim 10 above. The combination of Nagle in view of Wang et al., Nagle teaches a system including a secure server environment (p. 8 slide 16) but does not teach a system wherein said circuitry monitors and logs access. Pfleeger on the other hand teaches that auditing is a key feature of secure systems (p. 289) and that auditing includes monitoring and logging access (p. 291 logging security events). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Pfleeger's auditing system with the secure system of the combination of Nagle in view of Wang et al., because of Pfleeger's teaching that auditing is a key feature of secure systems.

Regarding claim 18, the combination of Nagle in view of Wang et al. and Wang et al. teaches the invention substantially as claimed. See the rejection of claim 17 above. The combination of Nagle in view of Wang et al. does not teach a system wherein said circuitry employs results from access monitoring and logging to detect unauthorized intrusion. Pfleeger on the other hand teaches the use of audit information in an intrusion detection system (p. 292). An intrusion detection uses such a system to detect unauthorized intrusion. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Pfleeger's automated intrusion detection system with the secure system of the combination of Nagle in view of Wang et al. because of Pfleeger's teaching that it enhances security by reducing the amount of audit information a human must review (p. 292).

Regarding claims 8-9, they are method claims corresponding to apparatus claims 17-18, respectively. Since they do not teach or define above the information in the corresponding apparatus claims, they are rejected under the same basis.

4. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references detail networked storage systems.

Wang et al. 6,834,326

Wilson et al. 6,738,821

Civanlar et al. 5,805,805

Cowager et al. 6,314,477

Gibson et al. "A Cost-Effective, High-Bandwidth Storage Architecture"

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry D. Donaghue whose telephone number is 571-272-3962. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).